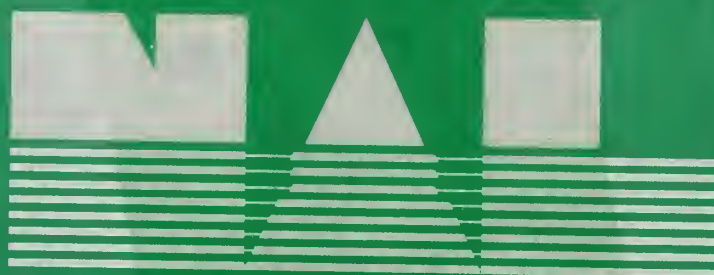


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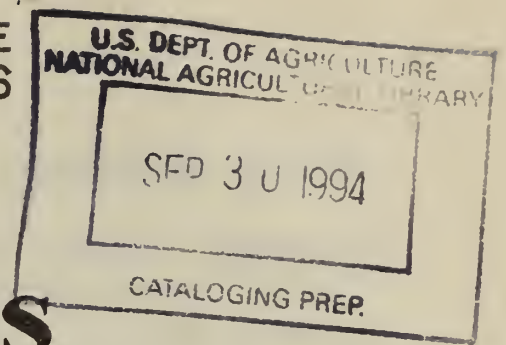
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HOMEMADE FIRELESS COOKERS

The fireless cooker steps forward again as in the last war to help the busy homemaker provide hot meals for the family and to release time for her to take over other work on the farm or in the factory. It also furnishes a satisfactory way for keeping food warm in canteen feeding.

A fireless cooker is an insulated well. Two stones, which are heated on the stove, then put into the cooker, provide the heat. The food must be heated to the boiling point before you put it into the cooker. If the cooker is used merely for keeping food warm for a short period of time, the heated stones need not be used.

The fireless cooker is especially good for foods needing long cooking. It is very useful for transporting foods which must be prepared in one place and served in another. The fireless cooker is a fuel saver if a wood or coal range is used for heating the stones and starting the food cooking, although it does not save fuel with an electric or gas stove. Cereals, dried beans, tough cuts of meat, dried vegetables and fruits are particularly adaptable to fireless cooking since their flavor is best developed when they are cooked slowly. After the food is once started, it takes no further care until it is lifted out steaming hot. With a little thought and practice the hot dishes for one meal can be prepared in the fireless cooker.

MATERIALS

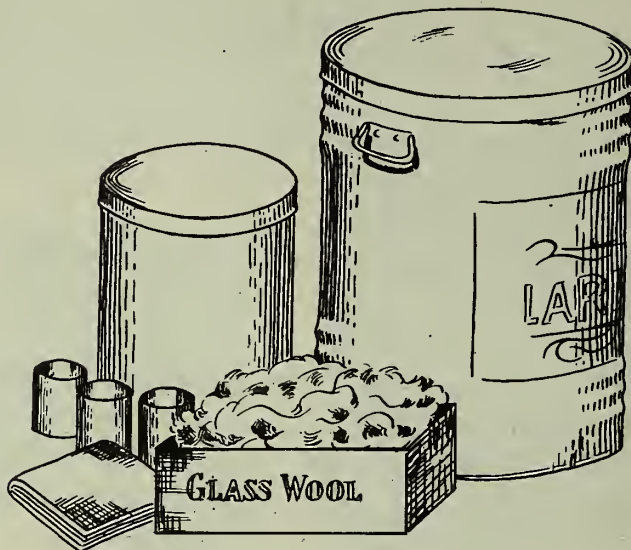
You can make a fireless cooker with materials already on hand or cheaply bought. You need an outside container with a tight cover; a smaller inside can to hold hot stones and food pans; three small metal cans and four small wooden blocks for supports for the inside container; insulating material between the cans, such as rock wool, fiber glass, cinders, sawdust, Spanish moss, or crumpled paper; a collar to cover the insulating material; calking to fill the cracks; two flat stones that will hold heat; and an insulating cushion to cover the inset can. The sizes recommended in the following pages are for home cookers and not canteen feeding, which requires larger containers. The following materials are suggested, although others may be found which will give satisfactory results.

OUTSIDE CONTAINER

Material. Wooden box or metal can; metal preferable, as it is fireproof.

Size. Depends on size of inset can used. Must allow for at least 3 inches of insulation between outside container and inset can. A can 16" x 20" or a box 16" x 16" x 20" is satisfactory for home use.

Suggested containers. A 110-pound lard can, galvanized ash or garbage can, barrel, old trunk, small ice box with top lid, or box made especially for the purpose.

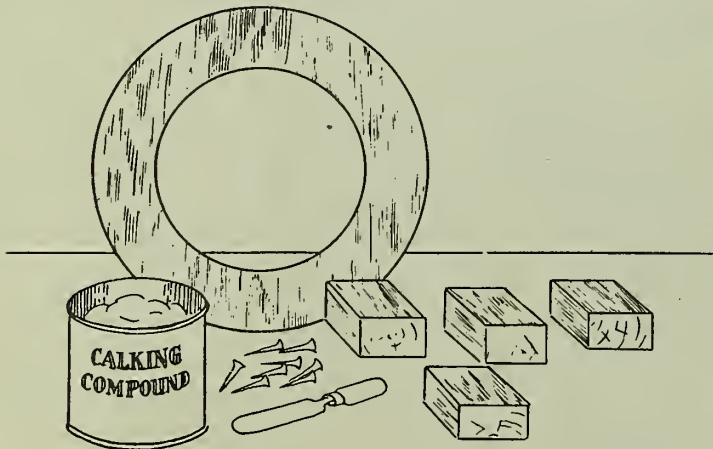


INSET CONTAINER

Material. Metal, with tightly fitting lid.

Size. Depends upon use. For ordinary home cooking, large enough to hold two cooking utensils and two heating stones.

Suggested containers. Thirty-pound frozen egg or frozen fruit can. These may be obtained from bake shops or restaurants.



SUPPORT FOR INSET CONTAINER

Bottom. Three metal cans of equal height.

Sides. Four wooden blocks approximately $1\frac{1}{2}$ " thick, 3" wide, and as long as the space between the outer and inner containers.

INSULATION BETWEEN CANS

Cookers with heated stones require fireproof material, such as rock wool or glass fiber.

Cookers without heated stones do not require fireproof material. While not as good insulators, sawdust, crumpled paper, Spanish moss, or wool can be used. Cinders can also be used if insulation is made 6 inches thick.

TOP INSULATION

Material. Cushion made from heavy, tightly woven fabric, such as duck, filled with insulating material. Insulation should be moisture proof and soft so cushion will seat itself around top of inset container. Rock wool or glass fiber are most satisfactory.

COLLAR

Material. Wood, pressed board, or battleship linoleum.

Size. Cut to fit as snugly as possible between outside and inset cans.

CRACK-FILLER - Calking compound.

HEATING STONE

Material. Soapstone, concrete blocks.

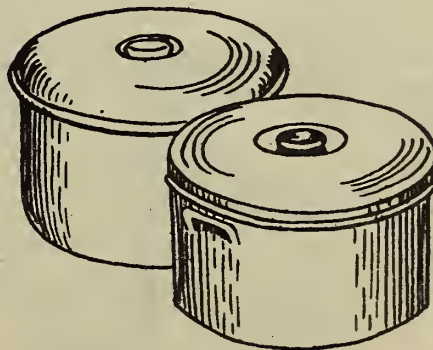
Size. $1\frac{1}{2}$ " x $8\frac{1}{2}$ " maintains boiling for 2 to 3 hours.
 $1\frac{3}{4}$ " x $8\frac{1}{2}$ " maintains boiling for 3 to 4 hours.

COOKING UTENSILS

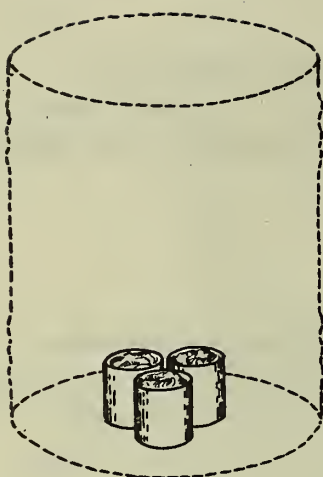
Material. Any material suitable for top-of-stove cooking. An oyster bucket or similar bucket with a removable bale handle can also be used.

Size. Pans with about the same diameter as the heating stones are best.

Style. Must have tightly fitting lids, flat bottoms and tops for stacking, and handles for lifting.



MAKING THE COOKER

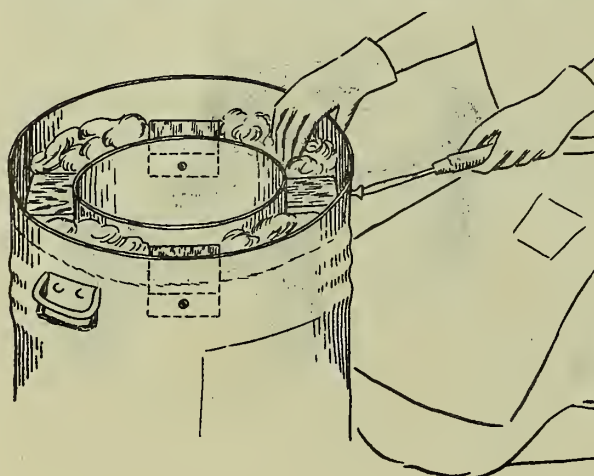


Fill the three small cans with insulating material. If glass fiber is used, wear gloves and long sleeves, as the small particles of glass are apt to prick the skin. Place the three cans about 1 inch apart in the center of the bottom of the outside container. Pack the bottom of the container with the insulation up to the top of the small cans.

If rock wool in bat form 1 or 2 inches thick is used, cut a strip approximately $3\frac{1}{2}$ inches shorter than the inset container and long enough to wrap around the container to form a blanket of insulation which will fill the space between the two cans. Place one edge at bottom of container and roll the insulation on the can to the desired thickness. If a rectangular outside container is used, pack the corners with additional insulation. Slip the container and the insulation into the outside container and center on top of the three can supports.

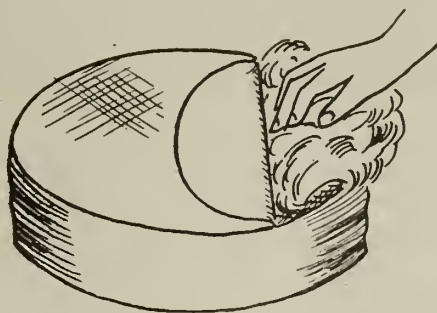
If a loose type of insulation is used, center the inset container on the top of the three cans and pack insulation between the walls of the two containers. Pack to within approximately $3\frac{1}{2}$ inches of the top of the inset container.

Place the four small wooden blocks equal distances apart between the walls of the two containers and screw in place. The top of the block should be approximately 2 inches from the top of the inset container. One screw through the inset container and one through the outside container is sufficient for each block. Pack insulation between the blocks and level with their tops. Place collar, which has been cut to fit, so that it will rest on the wooden blocks. Fill the cracks between the cans and the collar with calking compound. Calking can be worked easily with a spatula or wooden spoon.



INSULATING CUSHION

Out two circular pieces of fabric the same diameter as that of the outside container. Also cut a strip of material 5 inches wide and long enough to fit around the circular pieces. Sew the pieces together making a box cushion. Leave one seam open for about 12 inches for putting in the insulation. Fill the cushion, but do not pack it tightly. It must be soft enough to fit down around the sides of the inset can.

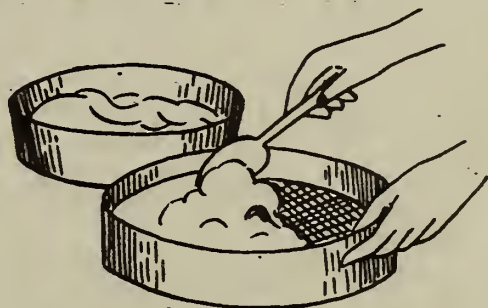
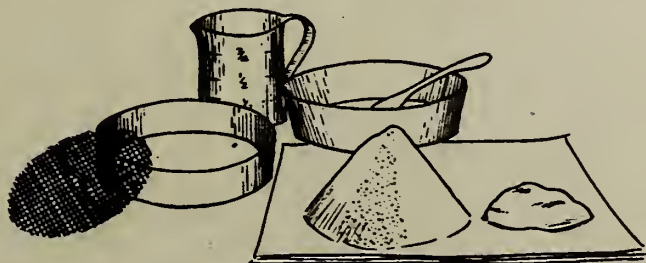


HEATING STONES

Either soapstones or concrete stones are satisfactory. There is very little difference in the time required to heat the two materials or in the time they will hold their heat. Soapstones last longer than concrete, but are more expensive. Soapstones are purchased already made. Before using, temper them by placing in a warm oven (250°F.) for about 24 hours.

Concrete stones are homemade. Use two parts of sand to one part cement. Mix well and add water to make a thin paste. Pieces of asbestos fiber approximately 1 inch in length mixed with the concrete will make the stones last longer. This is not necessary, however, for a satisfactory stone.

To mold the stone, make a form with two pieces of heavy cardboard. For the bottom of the form, cut one round piece $8\frac{1}{2}$ inches in diameter. For the side, cut a piece of cardboard $1\frac{1}{4}$ or $1\frac{1}{2}$ inches wide, depending on how thick you wish to make the concrete block. Fasten this strip to the bottom piece with Scotch tape, or glue in some other way, to make the sides of the form. To make a stronger stone, place a round piece of heavy wire screening, slightly smaller than the form, in the center of the mold. Weave a piece of straight wire into the screening and loop it in the center of the screening. This serves as a screw eye for lifting the stone. After filling the mold with the concrete mixture, smooth the top with a spatula so that the stone will have a level surface.



When the concrete has set so that water does not ooze out of it, scoop out enough concrete to expose the wire loop. Let stand for 2 or 3 days before removing the cardboard form. Before using the stone it must be tempered by placing in boiling water for 15 minutes. Let it dry again for approximately 2 days.

USING THE COOKER

Heat the stones on the top of the range. You can shorten the heating time by covering the stones with an inverted skillet or pan. A stone is hot enough when a pinch of flour sprinkled evenly on top browns in 15 seconds.

The food must be boiling before you put it into the cooker. Be certain the lid of the pan fits tightly. This is essential to prevent the loss of steam and to help maintain boiling.

A wire or metal trivet or even the top of an old tin bucket placed in the bottom of the inset can will help protect the bottom of the container from the intense heat of the stone. Place the heated stone directly on top of the trivet or can lid and the tightly covered pan of boiling food on top of the stone. If a second pan of food is to be cooked, place the second stone either between the pans or on top of the second pan. The latter position provides for a longer boiling period, but may heat the top of the inset can so that the cover of the insulating cushion may scorch. Cover the inset can as quickly as possible, and put the box cushion in place. Put on the cover of the outside container.

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